

1
20²⁵

THE LIBRARY OF THE
JAN 4 - 1938
UNIVERSITY OF ILLINOIS

ZOOLOGICAL SERIES
OF
FIELD MUSEUM OF NATURAL HISTORY

Volume XX CHICAGO, DECEMBER 28, 1937 No. 25

NOTES ON SNAKES FROM THE YUCATAN
PENINSULA

BY E. WYLLYS ANDREWS

The present paper embodies studies on a collection made by the author in Yucatan and Quintana Roo during the months of July and August 1937, while in the pursuit of other duties, and presented to Field Museum of Natural History. It is intended to supplement a previous paper on my Yucatan collection of 1934, (Schmidt and Andrews, Zool. Ser. Field Mus. Nat. Hist., 20, pp. 167-187, 1936), and includes only species on which additional notes or a change of status are to be recorded. I am much indebted to Mr. Melvin Traylor of Chicago for valuable assistance in the field, and take this opportunity to thank Miss Eunice Blackburn and Miss Beatty of the Colegio Americano in Mérida for the gift of eight specimens. Without the generous aid of Mr. Karl P. Schmidt of Field Museum, the preparation of this paper would have been impossible.

The political boundaries of the State of Yucatan appear to define quite satisfactorily a corresponding faunal province. The peninsula, including the Mexican states of Yucatan, Campeche, and the Territory of Quintana Roo, British Honduras, and the Department of Peten in Guatemala, cuts into the Caribbean from the mainland of Central America from Latitudes 16° to 22° N. It reaches a maximum width of about 350 kilometers. The different ends of the peninsula are at meteorological, faunal, and floral extremes. The northern tip is flat, low, semi-arid bush country with next to no surface water and very low vegetation; the base of the peninsula is wet, and often mountainous, and is covered with typical, tropical rain forest. There is a marked change from bush country to forest at a line almost coincident with the border between Yucatan and Quintana Roo, the forest extending farther north on the damper eastern coast of the peninsula. Along the Quintana Roo border, the change from semi-arid to rain forest conditions is so marked as to be easily

distinguishable even in a few miles. One might expect the Quintana Roo fauna to be radically different from that of Yucatan, and even localities as close to Yucatan as Cobá or Telantunich, just across the southern border, exhibit evidences of this transition, even in the small amount of work done thus far in herpetology.

Yucatan in general presents different species or subspecies than the country directly to the south. Some of them are directly allied in the two areas, while in other cases the Yucatecan form is quite isolated. The snake fauna may be divided into three general classes. The first comprises forms not connected by intergradation with the fauna of neighboring areas and contains twelve species:

<i>Typhlops microstomus</i>	<i>Sibynomorphus sanniolus</i>
<i>Thamnophis arabdotus</i>	<i>Conophis concolor</i>
<i>Elaphe flavirufa</i>	<i>Imantodes splendidus</i>
<i>Entechinus mayae</i>	<i>Coniophanes meridanus</i>
<i>Ficimia publia</i>	<i>Coniophanes schmidtii</i>
<i>Sibynomorphus brevifacies</i>	<i>Tantilla canula</i>

The second class comprises six subspecies of more widespread forms in neighboring areas:

<i>Ninia sebae morleyi</i>	<i>Geophis multitorques yucatanensis</i>
<i>Eudryas boddaerti melanolomus</i>	<i>Leptodeira yucatanensis yucatanensis</i>
<i>Lampropeltis polyzona blanchardi</i>	<i>Micrurus affinis mayensis</i>

The third class comprises Yucatecan examples of widespread forms without subspecies, at present including twenty-four species. The first of these classes seems to represent the remainder of an earlier fauna which has now in part disappeared in the territory adjacent to Yucatan, while the second may represent adaptations of the later fauna to the different ecological conditions of the northern part of the peninsula. However, as more thorough studies are made with future accumulations of specimens, it is highly probable that the second group will be enlarged at the expense of both the first and the third. Some of the genuinely characteristic Yucatecan forms extend southward in the peninsula beyond the limits of the scrub forest.

***Typhlops microstomus* Cope.**

A specimen from Chichen Itza, No. 26975; scales in 18 rows around body; 487 scales from rostral to tail; total length 31 mm., diameter at mid-body 5 mm. This specimen in life was pure white, showing no pink coloration.

***Constrictor constrictor imperator* (Daudin).**

Four specimens from Chichen Itza, Nos. 26989-92. Dorsals 56 to 62; upper labials 19-19 to 20-20; lower labials 23-22 to 23-24; tail length .13 to total.

Ninia sebae morleyi Schmidt and Andrews.

Two additional specimens from Mérida, Nos. 26996-7, female and male respectively, show the higher ventral and lower caudal counts to be expected from this subspecies: ventrals 150, 147; caudals 39, 49.

Thamnophis arabdotus sp. nov.

Type from Catmis, Quintana Roo. No. 26994 Field Museum of Natural History; female, collected by E. Wyllys Andrews, Aug. 4, 1937.

Diagnosis.—Allied to *Thamnophis phenax*, but distinguished by a lower number of ventral scales, bilateral punctulation on the light background of the venter, and distinct differences in dorsal and probably cephalic coloration.

Description of type.—Body short and somewhat thickened; head cylindrical and only slightly distinct from neck, somewhat compressed; pupil round; rostral about half as high as wide and hardly visible from above; internasal suture about equal to prefrontal; frontal shield about one and one-half times as long as wide; supraoculars small; parietals only slightly larger than frontal; nasals divided, in contact with two upper labials; loreal small, approximately square; one preocular and three postoculars on both sides; temporals 1-2 on both sides; upper labials 8-8, the third and fourth on each side entering orbit; lower labials 10-10, the first pair in contact behind the mental; posterior chin shields one and one-half times as long as anterior; dorsal formula 19-19-17; ventrals 140; anal plate single; caudals 72.

Color (in alcoholic specimen): ground olive gray, top of head dark olive gray extending about 12 scale rows down neck as a nuchal band; ventral aspect cream yellow near head, which color extends upwards in streaks through several upper labials on both sides and disappears in the dark olive gray of top of head; two marked white streaks on fourth and sixth upper labials extend on both pre- and postoculars to make a distinctive head pattern; ventral scales light gray beyond the neck and punctate bilaterally with dark spots; a clear mid-dorsal light band three scales wide the whole length of the specimen; vertical black bands extending from this line to the second scale row, becoming less distinct near the vent and absent on the tail. Lateral light lines absent.

Measurements.—Total length 300 mm.; tail length 70 mm.

Remarks.—This specimen clearly belongs to Ruthven's "*elegans* group" and not to the "*sauritus* group" already known from Yucatan.

The closest affinity is with *Thamnophis phenax*, which also lacks the lateral striping, and has the same relatively short tail. Our specimen differs from *phenax*, however, in various characteristics; the number of ventrals (140) is considerably lower than that recorded for Ruthven's two specimens of *phenax*, a difference more marked in that our specimen is a female and still maintains a high caudal count (Ruthven fails to mention the sex of his specimens). The ventral punctulation and distinctive head pattern of our specimen are not mentioned in Cope's description of *phenax*, (based on six specimens) nor in Ruthven's description. Finally, the lateral bars of our specimen are interrupted by a light mid-dorsal band 3 scales wide, while Ruthven states that the bars on *phenax* "extend entirely across the back." It is possible that further work will bring out intergradation between the highland *phenax* and lowland *arabdotus*, though specimens of this group do not appear to have turned up in British Honduras nor in Campeche, at the base of the Yucatan peninsula.

***Thamnophis sauritus proximus* (Say).**

A single male specimen from Cobá, Quintana Roo, No. 26972. Dorsals 19-17-17; ventrals 153; anal entire; caudals 90; upper labials 8-8; lower labials 9-11; preoculars 2-2, postoculars 3-3; temporals 1-2 on both sides; total length 656 mm., tail length 198 mm.

***Drymobius margaritiferus* (Schlegel).**

Three male specimens from Cobá, Quintana Roo, Nos. 26979-81. These have dorsals 17-17-15; ventrals 151, 152, and 150, respectively; caudals 123, 108, and one incomplete; upper labials 9-9; lower labials 10-10; oculars 1-2; temporals 2-2; No. 26980 measured 1024 mm., tail length 346 mm. A fourth specimen was seen at Telantunich, Central Quintana Roo, but this snake has not yet been reported from Yucatan proper.

***Elaphe triaspis* (Cope).**

Four specimens from Mérida and Chichen Itza are in close agreement with those previously reported, except that No. 26970 from Chichen Itza has ventrals 247 and caudals 95, a lower number of ventrals than any specimen heretofore reported from Yucatan.

***Conophis concolor* Cope.**

Two additional specimens from Chichen Itza, Nos. 26986-7, agree with those previously reported in their complete lack of dorsal striping.

Coniophanes meridanus Schmidt and Andrews.

Four specimens of this snake (Field Museum Nos. 26998–27001, Mérida, Yucatan) confirm our previous analysis of the species from a single incomplete example. The dorsal count on these snakes is uniformly 17–17–15, as opposed to the 19–19–15 of *Coniophanes imperialis*. The ventrals range from 122 to 125 in male specimens and are 127 in the single female; caudals from 81 to 92 in the males and 86 in the female. Upper labials 7–7; lower labials 8–8, 8–9, and 9–9; oculars 1–2; and temporals 1–2 in all specimens. No. 27001 (female) measures 315 mm., tail length 95 mm. The color distinctions described for the type are valid. The lateral banding and ventral spots of *imperialis* are missing in all specimens, and the distinctive red coloration is marked.

Coniophanes imperialis clavatus (Peters).

A single female specimen, Field Museum No. 27002, was taken about five miles south of the Quintana Roo border, near Catmis. Dorsals 19–19–15; ventrals 139; caudals 80; upper labials 8–8; lower labials 10–10; oculars 1–2; temporals 1–2 on right, 1–3 on left; total length 223 mm., tail length 67 mm.

This specimen, both in scutellation and coloration, falls into the normal *imperialis clavatus* pattern, showing none of the characteristics of *meridanus*.

Micrurus affinis mayensis Schmidt.

A single male specimen from Cobá, Quintana Roo, Field Museum No. 26974. Dorsals 15–15–15; ventrals 202; caudals 57, 26 of which are entire; upper labials 7–7; lower labials 7–7; oculars 1–2; temporals 1–2; total length 652 mm., tail length 198 mm. The large number of entire caudals clearly shows the coral snake of northern Quintana Roo to be *mayensis*.

Crotalus durissus durissus (Linnaeus).

A female specimen from Catmis, No. 26973. Dorsals 25–27–19; ventrals 177; caudals 32; total length 486 mm.; tail length 64 mm.